TITLE 327 WATER POLLUTION CONTROL BOARD

LSA Document #99-263
SUMMARY/RESPONSE TO COMMENTS RECEIVED AT THE FIRST PUBLIC HEARING

On October 13, 1999, the water pollution control board (board) conducted the first public hearing/board meeting concerning the development of new rule 327 IAC 2-11 establishing ground water quality standards. Comments were made by the following parties:

John Kyle for Barnes & Thornburg (B&T)
Mark E. Shere for Bethlehem Steel Corp. (Beth)
Vince Griffin for the Indiana Chamber of Commerce (CC)
Betsy DuSold for Eli Lilly and Company (Eli)
Rae Schnapp for Hoosier Environmental Council (HEC)
Jeff Stant for Hoosier Environmental Council (HEC)
Dana Meier for the Indiana Coal Council (ICC)
Bob Johnston for Ispat Inland Inc. (III)
Tom Berquist for Ortman Drilling Company (Ort)
Greg Buck and Richard Hill (comments delivered by Jeff Stant) for Save the Valley (SV)
Tom Anderson for Save the Dunes Council (Dunes)
Bill Hayden for the Hoosier Chapter of the Sierra Club (SC)
Jane Dustin (comments delivered by Bill Hayden) for the Izaak Walton League (IWL)
Charles H. Norris (comments delivered by Bill Hayden) for Geo-Hydro, Inc. (GH)

Following is a summary of the comments received and IDEM's responses thereto:

Comment: A rule concerning ground water standards is long over due and this long delay since the original statute charged the water pollution control board to adopt standards causes questions as to the earnestness of Indiana’s commitment to attain any kind of reasonable ground water standards. (SV)

Response: IDEM agrees that a rule concerning ground water standards is necessary and, with this preliminarily adopted draft, has attempted to overcome some of the barriers that have prevented the accomplishment of ground water quality standards in the past.

Comment: The board needs to adopt ground water standards that are more stringent than the ones that are in the draft rule for preliminary adoption because ground water can be contaminated easily from many sources and the cost of clean up of contaminated ground water or providing alternative water supply should outweigh consideration of the cost to comply with a rule containing adequately stringent standards. (SV)

Response: The establishment of ground water quality standards does not lessen the obligation of facilities, practices, or activities to comply with other established rules, regulations, and policies designed to prevent and otherwise minimize ground water contamination, such as secondary containment, spill reporting, wellhead protection, and the risk integrated system of closures. IDEM believes the ground water quality standards established in this preliminarily adopted draft are sufficiently stringent to protect the beneficial uses of ground water, particularly

its use as a drinking water source.

Comment: The draft rule requires no action until ground water becomes unfit to drink. The rule should require that contamination be prevented before it approaches unsafe levels and not allow such prevention to be exercised as discretionary authority by various state agencies. (SV, HEC)

Response: Section 2(c) of this preliminarily adopted rule requires action by the department of environmental management, the department of natural resources, the state department of health, the office of the state chemist, and the office of the state fire marshal to "ensure the criteria established in this rule will not be exceeded" and "eliminate or minimize potential adverse impacts". IDEM believes that agencies should act proactively in accordance with this section of the rule. The rule is designed to protect the beneficial uses of ground water, particularly its use as a drinking water source. Additionally, the establishment of ground water quality standards does not lessen the obligation of facilities, practices, or activities to comply with other established rules, regulations, and policies designed to prevent and otherwise minimize ground water contamination, such as secondary containment, spill reporting, wellhead protection, and the risk integrated system of closures.

Comment: There are many substances for which toxicological data are not presently available primarily due to the vastness of these substances and that environmental agencies have not had the time to develop toxicological data for them; however, there is scientific community agreement that many of these substances are dangerous to human health and the environment. Under the draft rule, these unclassified substances are exempt from any regulation. To err on the side of safety and to be in keeping with state law, there should be no discharges to potable water allowed by the ground water standards rule. (SV)

Response: IDEM believes the language of section 6(d) of the preliminarily adopted rule, "If the commissioner determines that a numeric criterion for a contaminant without a drinking water class numeric criterion established in subsection(a) is necessary, a risk analysis shall be used to establish a numeric criterion for that contaminant ...", enables an agency to use the ground water quality standards to regulate any contaminant of concern.

Comment: Risk assessment analysis is appropriate for establishing levels of clean up at a contaminated site; however, the draft rule allows risk assessment formulae to be use to calculate allowable concentration limits. Ground water should not be allowed to be polluted above existing background levels. To do otherwise is merely a license to pollute. (SV)

Response: IDEM believes that, in the absence of a United States Environmental Protection Agency (EPA) established maximum contaminant level, risk assessment analysis is appropriate to establish numeric criteria for ground water quality. Additionally, the establishment of ground water quality standards does not lessen the obligation of facilities, practices, or activities to comply with other established rules, regulations, and policies designed to prevent and otherwise minimize ground water contamination, such as secondary containment, spill reporting, wellhead protection, and the risk integrated system of closures.

Comment: The draft rule allows the contamination of small water supplies up to ten (10) times safe drinking water standards which seems to be an example of environmental injustice against relatively powerless individuals. (SV)

Response: Section 5(2) of the preliminarily adopted rule says, "Ground water shall be maintained and protected to ensure that a contaminant concentration attributable to human activity does not increase in a drinking water well.". This narrative criterion applies to any drinking water well whether it is public or private, rual or urban, or small or large. Therefore,

IDEM does not believe that the rule allows the contamination of small water supplies.

Comment: The draft rule provision for a ground water management zone needs to be removed because these zones are imaginary constructs designed for the convenience of the polluters. A ground water management zone bears no true relationship to the reality that, within a given aquifer, there is no distinct barrier that would prevent ultimate conveyance of the pollutants beyond the boundaries of such zones. (SV)

Response: Section 5(1) of the preliminarily adopted rule says, "Ground water quality shall be maintained, at a minimum, to protect the existing and reasonably expected future use of the ground water.". This narrative criterion applies to any class of ground water. Additionally, according to section 9 of this rule, an agency should consider, among other factors, the risks of human exposure and the impacts to any natural resource and the environment when establishing a ground water management zone which is defined in the rule as "a three (3) dimensional region of ground water around a potential or existing contaminant source where a contaminant is or was managed to prevent or mitigate deterioration of ground water quality such that the criteria established in this rule are met".

Comment: The application of a ground water management zone to the corrective action standards under the landfill rules is of concern. (HEC)

Response: Section 9(b) of this rule says, "The agency with jurisdiction over a facility, practice, or activity shall determine the location of the boundary and the duration of the ground water management zone.". This allows a regulatory program, including one (1) with oversight of the corrective action standards under the landfill rules, to establish an appropriate zone within the requirements of the rules and regulations it oversees.

Comment: The concept that future contamination is okay if it existed historically from an activity that was considered legal under another law is a problem. A rule should not be adopted that allows the continuation of ground water contamination because it resulted from an activity that formerly was allowed; ground water contamination should simply be banned. (HEC)

Response: IDEM does not believe that future contamination is okay. Section 5(1) of the preliminarily adopted rule says, "Ground water quality shall be maintained, at a minimum, to protect the existing and reasonably expected future use of the ground water.". This narrative criterion applies to any class of ground water. Additionally, the establishment of ground water quality standards does not lessen the obligation of facilities, practices, or activities to comply with other established rules, regulations, and policies designed to prevent and otherwise minimize ground water contamination, such as secondary containment, spill reporting, wellhead protection, and the risk integrated system of closures. Distinguishing between a regulated and an unregulated source is one (1) consideration in the prioritization of ground water management efforts. If a facility, practice, or activity is determined to be a ground water contamination concern, then regulations can be developed to manage it to protect ground water quality.

Comment: The draft rule contains provisions that are unenforceable. Two (2) examples are the definition of ground water as water in the zone of saturation and the application of the ground water standards only to facilities that are already regulated. One hundred percent (100%) saturation rarely exists in the real world which could render nothing being called ground water and ground water standards should apply to the protection of ground water no matter what is the source of contamination. (SV)

Response: IDEM will consider changing the definition of ground water. Distinguishing between a regulated and an unregulated source is one (1) consideration in the prioritization of ground water management efforts. Section 2(c) of the rule directs agencies to adopt rules to

implement the ground water quality standards. If a facility, practice, or activity is determined to be a ground water contamination concern, then regulations can be developed to manage it to protect ground water quality.

Comment: Workgroup members and IDEM staff have worked through many contentious issues to produce the current draft rule, and though it is not a perfect rule containing answers to all the continuing questions, the draft rule is acceptable and can go forward from this point and be supported for preliminary adoption. (Eli, Beth, CC, B&T, III, Ort, ICC)

Response: IDEM thanks the commenting parties for their support.

Comment: IDEM's comment, that it believes enforcement authority, to enforce these ground water standards, exists through the state's enforcement authority under IC 13-30, contradicts IDEM's other statement that there isn't an impact on facilities directly through these rules and there is no economic impact on those facilities from this rule. (Eli, Beth, CC, B&T, III)

Response: The fiscal impact analysis required by IC 4-22-2-28 is required only if compliance with the proposed rule will effect the state and entities regulated by the proposed rule. Any costs associated with an enforcement action taken by IDEM in regard to the ground water quality standards would be a result of noncompliance with the rule and are not part of the fiscal impact of the rule for purposes of IC 4-22-2-28.

Comment: A specific solution to the inconsistency of whether there is an economic impact on facilities from this rule is to include a statement that says these are not standards for the purposes of IC 13-30. (B&T)

Response: IDEM believes that to exempt these standards from the enforcement authority granted in IC 13-30 would be contrary to the statutory purpose of the agency to preserve, protect, and enhance the quality of the environment. The standards established in the rule clearly are standards subject to enforcement under 13-30.

Comment: The language of the draft rule is unclear regarding the relationship between the default management zone and a site-specific management zone. In a situation where a facility is large and complex, it is likely that a default management zone would be too restrictive. (Beth)

Response: Section 9(b) of the rule says, "The agency with jurisdiction over a facility, practice, or activity shall determine the location of the boundary and the duration of the ground water management zone.". Thus, it is up to the regulatory program implementing the ground water quality standards to establish an appropriate ground water management zone, and it is the regulatory program's decision which type of zone, whether default, program specific, or site specific, is most appropriate.

Comment: A weakness in the draft rule is that it does not accurately reflect the basis of EPA's reason for setting the lead action level at fifteen (15) parts per billion. (Beth)

Response: The lead criterion of fifteen one-thousandths (0.015) mg/l was based not only on EPA's action level, but also on risk calculations by IDEM. IDEM understands that some people believe this is a conservative criterion, but IDEM believes, that since lead is a serious health threat to children, it is an appropriate criterion.

Comment: The draft rule contains two (2) critical elements without which the ground water standards rule will not work. These elements are the ground water management zone and the classification scheme. A rule that applies a drinking water standard at all times and in all places will not be practicably implementable. However, as the draft rule is written, it would be possible that, aside from a default or a site specific ground water management zone, the regulatory agency could simply declare the existence of a ground water management zone

without any rigorous analysis of what the appropriate zone should be. (III)

Response: IDEM included the concepts of the ground water management zone and the classification scheme to assist in the practical application of the ground water quality standards. The language in the preliminarily adopted rule regarding this concept was developed with much discussion and input from the ground water quality standards workgroup. According to section 9 of the rule, an agency should consider, among other factors, the risks of human exposure and the impacts to any natural resource and the environment when establishing a ground water management zone. IDEM believes this language promotes an analysis of what the appropriate zone should be.

Comment: There is a broad use of water in Indiana and it needs to be protected. Ground water needs to have the same protection that has been afforded to public water supplies. Water supplies for private use as well as for public water supplies should have corresponding standards so as to be in keeping with the wellhead protection rule. (Ort)

Response: IDEM agrees and believes that the establishment of the drinking water class provides equivalent protection for both private and public drinking water supplies.

Comment: The rulemaking process, while requiring an investment of considerable time on the parts of many, has been frustrating in that the rule before the water pollution control board for preliminary adoption has not been seen or approved by the Ground Water Task Force. (HEC)

Response: The Ground Water Task Force was periodically updated on the rulemaking process and was informed of the workgroup meetings. The Ground Water Task Force routinely provided input on the rule development. On September 28, 1999, the individual members of the task force and the workgroup were sent, through electronic mail, the draft of the rule language that was preliminarily adopted on October 13, 1999. According to IC 13-18-17-1, the Ground Water Task Force was established to study ground water contamination, coordinate efforts to address ground water pollution and implementation of the Indiana ground water quality protection and management strategy, and to develop policies to prevent ground water contamination. The Ground Water Task Force is not required to approve of any rules relating to ground water.

Comment: The draft rule has laudable goals, but the language of the rule does not ensure that these goals will be met. The rule may actually violate statutory obligations of the Ground Water Protection Act which states that one of the purposes of the ground water standards rule is to ban discharges to potable water supplies. It appears, instead, that the draft rule actually legalizes contamination that is occurring today and in the future. (HEC)

Response: IDEM believes that the goal of this rule, stated on section 1, supports the obligations of the Ground Water Protection Act "to maintain and protect the quality of Indiana's ground water and ensure that exposure to the ground water will not pose a threat to human health, any natural resource, or the environment". Section 5(1) of the preliminarily adopted rule says, "Ground water quality shall be maintained, at a minimum, to protect the existing and reasonably expected future use of the ground water.". This narrative criterion applies to any class of ground water. Additionally, the establishment of ground water quality standards does not lessen the obligation of facilities, practices, or activities to comply with other established rules, regulations, and policies designed to prevent and otherwise minimize ground water contamination, such as secondary containment, spill reporting, wellhead protection, and the risk integrated system of closures.

Comment: The rule will be used as a license to pollute up to the maximum contaminant level at some distance from the source, as far from the pollution source as the boundary of the

ground water management zone. A loophole of the rule may allow the ground water management zone to be viewed as a mixing zone for diluting pollutants in the ground water. (HEC)

Response: IDEM does not believe that this rule will be used as a license to pollute. Section 5(1) of the preliminarily adopted rule says, "Ground water quality shall be maintained, at a minimum, to protect the existing and reasonably expected future use of the ground water.". This narrative criterion applies to any class of ground water. According to section 9 of the rule, an agency should consider, among other factors, the risks of human exposure and the impacts to any natural resource and the environment when establishing a ground water management zone. Additionally, the establishment of ground water quality standards does not lessen the obligation of facilities, practices, or activities to comply with other established rules, regulations, and policies designed to prevent and otherwise minimize ground water contamination, such as secondary containment, spill reporting, wellhead protection, and the risk integrated system of closures.

Comment: As the rule is worded, a polluter may not even have to meet the maximum contaminant level at the edge of its ground water management zone. The polluter may, instead, be able to use some other number that is calculated based on a risk assessment formula. This is an inappropriate use of risk assessment which should be used as a tool for establishing how much contamination is acceptable to leave in place on a site that is already contaminated but not to allow pollution up to a level that is calculated to be safe based on a series of tenuous assumptions. (HEC, IWL)

Response: For drinking water class ground water, if there is an EPA established maximum contaminant level (MCL) for a constituent, then that MCL is the numeric criterion that must be met at and beyond the boundary of the ground water management zone. Section 6(g) does allow for a risk established criterion to be used within the boundary of the ground water management zone.

Comment: The last minute addition of language concerning coal mines into the rule provides an exemption for huge tracts of land in mining areas that are not subject to any standard. These areas should be designated as impaired drinking water class ground water but not as naturally limited ground water; however, section 4(c) of the draft rule allows pollution from mining impacts to become the standard in areas adjacent to the mining where people are using the ground water for drinking and irrigation. (HEC, Dunes)

Response: The approach of classifying the ground water in coal mined areas as naturally limited class is new to this draft of the rule. However, the concept is similar to the approach of considering the concentration of constituents in the ground water in coal mined areas as naturally occurring. This "naturally occurring constituent" approach was used in many of the prior drafts of the rule and is, therefore, familiar to the workgroup members. The classification of the ground water in coal mined areas as naturally limited does not provide an exemption for huge tracts of land in mining areas that are not subject to any standard. The narrative criteria of the rule apply as well as numeric criteria. For those contaminants attributable to coal mining activities, the existing concentration is the numeric criterion only when it is above the drinking water standard.

Comment: The federal Surface Mining Control and Reclamation Act requires prevention of material damage to the hydrologic balance outside of the permitted mining area, but this draft rule is stating that all of the waters inside a permitted area in the future, as well as the waters that could be influenced by the mining activity, many of which have pumping rates greater than those for public drinking water suppliers, now have the pollution level caused by the mining as the

standard for those waters. This is a taking against the people who use those waters. This language should be removed from the rule or limited only to the area inside the mine permit area as in the ground water rule in Illinois that uses an impaired use standard for the degradation caused by mining up to the edge of the mining boundary and applies drinking water class standards beyond the mining boundary. (HEC, Dunes)

Response: IDEM developed the rule language pertaining to coal mining with the Indiana department of natural resources (IDNR), the agency that implements the Surface Mining Control and Reclamation Act of 1977 (SMCRA). SMCRA recognizes that mining activities affect ground water quality and quantity. SMCRA requires that mining activities be planned and conducted to minimize changes to the prevailing hydrologic balance in both the permit area and adjacent areas to prevent material damage to the hydrologic balance outside the permit area. SMCRA also requires that mining operations be conducted to minimize water pollution and that in no case can federal or Indiana water quality rules or standards be violated. Therefore, based on IDNR's determination of the area of probable cumulative impact on the hydrologic balance, IDEM believes the rule adequately protects ground water resources.

Comment: The draft rule maintains a realistic view of the impact of coal mining on ground water, and in combination with other coal mining regulations, it will adequately maintain and protect ground water resources. (ICC)

Response: IDEM agrees. IDEM worked directly with IDNR to come to an understanding of coal mining issues in regard to ground water quality and to develop language that reflects that understanding.

Comment: At a previous meeting, the board asked how extensive is ground water contamination and is it a worsening problem. There is not a good answer available to those questions because it has not been researched, but evidence suggests that when Indiana begins to look in earnest it will be found to be widespread contamination. A ground water quality standards rule should incorporate the use of a preventative action level so that some action would be required to stop contamination before it reaches levels that are unsafe to drink. (HEC, IWL)

Response: The ground water quality standards establish contaminant levels for different classes of ground water. The standards are to be implemented by five (5) agencies that have oversight of many programs that deal with ground water quality. It is up to these agency programs to determine implementation tools that will ensure the ground water quality standards are met. Preventative action limits are a tool that each agency program may use when implementing standards.

Comment: There is presently in place an interim ground water standards rule that has existed for about ten (10) years and offers much greater protection and more clear language than the current version of the draft rule. The interim rule should remain in effect and preliminary adoption of the draft rule delayed until the board provides IDEM and the Ground Water Task Force with a directive to include in the rule a set of preventative action levels that are fractions of the maximum contaminant level to prevent contamination before the ground water becomes unfit to drink. (HEC, Dunes, SC, IWL, GH)

Response: The interim ground water quality standards rule, 327 IAC 2-1-7 contains general language for minimum ground water quality conditions that is difficult to apply in specific situations. Where more specific language is provided, it is limited in scope and application; for example, there are only four (4) specific contaminant concentration limits for public ground water supplies and only one (1) for industrial supplies. The interim standards do not specifically speak about private ground water supplies at all. The preliminarily adopted

ground water quality standards have broader scope than the interim ground water quality standards and do address the protection of private drinking water supplies.

Comment: The Clean Water Act has a provision not only to protect and maintain but also restore ground water quality. It would be insufficient to protect and maintain contaminated ground water without trying to restore it to good quality. Restoration is key to the Clean Water Act as it also should be to the state's treatment of ground water. (Dunes, IWL)

Response: The ground water quality standards establish contaminant levels for different classes of ground water. The standards are to be implemented by five (5) agencies that have oversight of many programs that deal with ground water quality, including ground water remediation programs. It is up to these agency programs to determine the appropriate level of ground water remediation.

Comment: The draft rule contains no consideration of components of the ecosystem other than human life. The biotic communities in ground water also deserve protection. (Dunes, IWL)

Response: Section 1 of the rule says, "The goal of this rule is to maintain and protect the quality of Indiana's ground water and ensure that exposure to the ground water will not pose a threat to human health, any natural resource, or the environment.". Additionally, Section 5(1) of the rule says, "Ground water quality shall be maintained, at a minimum, to protect the existing and reasonably expected future use of the ground water.". Support of a biotic community is a use of the ground water that should be protected. IDEM believes this language is adequate to protect biotic communities.

Comment: There seems to be a conflict in the rule regarding the language of section 5(3) concerning criteria for all ground water. A stream having a significant or its total amount of stream flow provided by ground water recharge is required by this rule to meet surface water maximum contaminant levels at the interface of the ground water and the surface water. The surface water standard is more strict than the standard this rule requires for ground water. The rule should be improved to eliminate this conflict by requiring more strict standards in the ground water. (Dunes, SC)

Response: The requirement to meet surface water quality standards at the ground water—surface water interface was included to provide consistency with the Clean Water Act and to protect surface water species in cases where the surface water is recharged by ground water.

Comment: Ground water is water of the United States, and it should be given at least the same protection as surface water. The rule needs an antidegradation policy that says no ground water should be degraded more than it already is. (SC)

Response: Section 5(1) of this preliminarily adopted rule says, "Ground water quality shall be maintained, at a minimum, to protect the existing and reasonably expected future use of the ground water.". This narrative criterion applies to any class of ground water. Additionally, the establishment of ground water quality standards does not lessen the obligation of facilities, practices, or activities to comply with other established rules, regulations, and policies designed to prevent and otherwise minimize ground water contamination, such as secondary containment, spill reporting, wellhead protection, and the risk integrated system of closures.

Comment: The rule is lacking various definitions that are needed, such as for the terms "existing use," "regulated facility," and "zone of influence." (SC)

Response: IDEM will review the need for additional definitions and include those determined as necessary for clarification of the rule.

Comment: Both existing uses and designated uses are mentioned in the federal Clean Water Act. Existing uses are mostly ignored in the draft rule, and the only designated use is

drinking water. Ground water recharges into streams seem to be an obvious use that is ignored by the rule. (SC)

Response: Section 5(1) of this preliminarily adopted rule says, "Ground water quality shall be maintained, at a minimum, to protect the existing and reasonably expected future use of the ground water.". This narrative criterion applies to any class of ground water. The requirement of Section 5(3) to meet surface water quality standards at the ground water—surface water interface was included to protect surface water species in cases where the surface water is recharged by ground water.

Comment: The rule as written could allow a polluter to never address the contamination caused if land adjacent to the boundary of the ground water management zone could continually be bought. (SC)

Response: The ground water quality standards establish contaminant levels for different classes of ground water. The standards are to be implemented by five (5) agencies that have oversight of many programs that deal with ground water quality, including ground water remediation programs. It is up to these agency programs to determine the appropriate ground water management zone and the appropriate level of ground water remediation. Property ownership is one (1) consideration of many when establishing a ground water management zone.

Comment: Section 2(a) of the draft rule is confusing as to who has authority and what activities are regulated. (IWL)

Response: The language of section 2(a) was taken directly from IC 13-18-17-5, the statute that authorizes ground water quality standards.

Comment: If section 2(b) of the draft rule was taken from IC 13-18-17-5, then it was done incompletely without providing water quality compliance levels for all waters rather than just monitoring at regulated facilities. (IWL)

Response: Section 2(b) of the draft rule was taken from IC 13-18-17-5 (a) as it was revised with the adoption of Senate Engrossed Act 83. IC 13-18-17-5 says, "The water pollution control board shall adopt rules under IC 4-22-2 establishing groundwater quality standards that include numeric and narrative criteria, a groundwater classification plan, and a method of determining where the ground water quality standards must apply. The standards established under this subsection shall be used for the following purposes:

(1) To establish minimum compliance levels for groundwater quality monitoring at regulated facilities.

(2) To ban the discharge of effluents into potable groundwater.

(3) To establish health protection goals for untreated water in water supply wells.

(4) To establish concentration limits for contaminants in ambient groundwater.

Comment: The rule should reference the federal Safe Drinking Water Act for treatment requirements for ground water and should define concentration limits and include restoration and clean up targets. (IWL)

Response: The ground water quality standards establish contaminant levels for different classes of ground water. The standards are to be implemented by five (5) agencies that have oversight of many programs that deal with ground water quality. It is up to these agency programs to determine implementation tools that will ensure the ground water quality standards are met. Preventative action limits and treatment requirements are tools that each agency program may use when implementing standards.

Comment: The message from a ground water quality standards rule should simply state that Indiana will no longer tolerate the squandering of its ground water resources. Prevention of

contamination is the foremost concept with clean up required of those who cause contamination and penalties paid if clean up is not accomplished. (GH)

Response: IDEM believes the ground water quality standards do send the message that ground water is a vital resource that must be protected though that exact wording is not contained in the preliminarily adopted rule. The ground water quality standards establish contaminant levels for different classes of ground water. The standards are to be implemented by five (5) agencies that have oversight of many programs that deal with ground water quality. It is up to these agency programs to determine implementation tools that will ensure the ground water quality standards are met. Preventative action limits and treatment requirements are tools that each agency program may use when implementing standards.

Comment: The best ground water should be protected by a standard of nondegradation whether or not it is currently being used. A ground water of lesser quality or quantity may warrant a lesser standard of protection, provided it is not upgradient of a higher class or does not support a unique environment or ecology. Ground water that has been depleted or degraded by human activity should be actively remediated or managed to remediate naturally without further increases of contamination. (GH)

Response: Section 5(1) of this preliminarily adopted rule says, "Ground water quality shall be maintained, at a minimum, to protect the existing and reasonably expected future use of the ground water.". This narrative criterion applies to any class of ground water. The classification plan established in section 4 of the rule recognizes that ground water may be afforded varying levels of protection, depending on specific circumstances.

Comment: The draft ground water quality standards rule is not a compromise achieved through equal representation by all concerned parties. It is, instead, the result of committees comprising one (1) environmental opinion opposed by numerous individuals representing a very profound economic interest in not protecting the ground water. (SC)

Response: IDEM welcomed all interested parties to participate in the ground water quality standards workgroup. Ultimately, it is the responsibility of IDEM to weigh appropriate factors, such as risk to human health and the environment, natural conditions, and site specific circumstances, and develop rule language that strikes a proper balance considering these factors. IDEM believes the language of the rule strikes a proper balance. IDEM did regard input from the workgroup when developing the rule language with the understanding that some opinions were under represented at the meetings. IDEM did not include any rule language as a result of a majority polling of the workgroup participants.